Response to Comments from U.S. EPA Source Control Decision (SCD) Ro-Mar Site ECSI #2437

The response numbers below correspond to the comment numbers in Kristine Koch's April 7, 2006 letter.

Contaminants of Interest

- 1. Metal constituents of interest (COIs) were based primarily on historic activity on the eastern parcel of the property. Trucking activity on the western parcel is relatively light. The City of Portland's initial evaluation of the Ro-Mar trucking operation on the western parcel, conducted prior to knowledge of the DEQ's cleanup project, indicated minimal concern about storm water impacts from Ro-Mar's operations.
- 2. As shown in Table 1 of the SCD, TPH identification analysis (HCID) was conducted on shallow soil samples GP-1 through GP-6 and catch basin sediment samples, and TPH as gasoline, diesel, and oil analyses were additionally run when detected in the HCID. TPH was not detected in samples GP-1 through GP-5, indicating a lack of significant petroleum releases in the eastern, undeveloped parcel.
- 3. See COI response # 1.
- 4. The DEQ understands that herbicides and pesticides are not used on this property, especially on the heavily vegetated undeveloped parcel.

Storm Water

- 1. The primary issue at this site is potential overland flow of shallow soil from the undeveloped, eastern parcel into the storm water collection and conveyance system on the developed western parcel, which eventually discharges southwest by a pipe to the International Slip in the Willamette River. DEQ concluded that this pathway was not complete because:
 - the eastern parcel is thickly vegetated (high rainfall infiltration, low runoff);
 - curbing separates the majority of the boundary between the two parcels, thus greatly minimizing potential soil transport to the storm water system;
 and
 - polychlorinated biphenyls (PCBs), the primary COI, were not detected in the two storm water catch basin sediment samples (located close to the undeveloped parcel), indicating that shallow soil is not migrating to the storm water collection system.

In general, the majority of rainfall infiltrates the undeveloped parcel and there is minimal surface runoff. The DEQ concluded that storm water runoff of shallow soil to the northeast was not a pathway of concern because:

- this area is thickly vegetated (including the "swale" itself) and is a very shallow surface slope (high rainfall infiltration, low runoff); and
- analytical data from shallow soil samples in the northern portion of the eastern parcel (GP-1, GP-2, and GP-3, representing the approximate area draining to the north), showed all COI concentrations (including total PCBs) less than the probable effects screening levels (PECs). The detection of Aroclor 1260 in one sample that was about equal to the applicable PEC did not appear significant considering the factors described above. Similarly, while PCB concentrations in GP-1, GP-2, and GP-3 exceed the sediment bioaccumulation screening level, off-site soil migration is unlikely. Water entering the "ditch" on the north side of N. Time Oil Road travels about one-half mile over flat topography before reaching the Columbia Slough, so impacts to the Columbia Slough from the subject site appears remote.

It appears that the area on site labeled as the swale was not a constructed drainage feature that may receive storm water from the road and the site.

- 2. See storm water response # 1.
- 3. Catch basins on the western parcel all drain to the manhole shown on Figure 2 of the SCD in the southwest corner of the parcel. Site storm water discharges from the onsite manhole to the northeastern side of the International Slip on the Willamette River; off-site connections to this conveyance pipe are unknown.
- 4. Catch basins CB-1 and CB-2 are representative of the potential migration pathway described in storm water response #1.
- 5. Considering the factors described in storm water response # 1 and the low solubility of PCBs, DEQ did not request storm water sampling in this case because the pathway does not appear to be complete.
- 6. Total PCBs in Table 1 should have been shown as the sum of the non-detected Aroclors, not as zeroes.
- 7. See storm water response # 1.
- 8. DEQ understands that Ro-Mar operations on the western parcel sought to minimize the potential for releases on to the pavement and subsequent migration to the storm water conveyance system. Besides catch basin cleanouts, the pavement was periodically swept.

Soils

1. The initial six shallow soil samples (GP-1 through GP-6) indicated some contamination in the southern portion of the eastern parcel, and the conceptual site

Response to EPA Comments Ro-Mar Source Control Decision Page 3 of 3

model is that this southern portion of the property was used for equipment storage as an extension of historic activities on the adjacent southern property (Schnitzer). An additional for soil samples (GS-1 through GS-4) were collected and analyzed to provide adequate sampling coverage in this southern portion. While the sampling design suggested in EPA comments have strong merits, it isn't the sampling design DEQ generally uses at all sites.

- 2. Since the DEQ determined that overland flow of shallow soil from the undeveloped, eastern parcel in to the storm water collection and conveyance system on the developed western parcel was not a complete pathway, subsequent evaluation of soils on the eastern parcel was based on potential human health and terrestrial ecological risk independent of Portland Harbor considerations. Soil data from sample GP-5 did not exceed such screening levels. The area around sample GP-6 where the soil removal was conducted is located in a topographic low spot and there are no surface migration pathways from this location to the Willamette River (i.e., via sheet flow or storm water conveyance systems).
- 3. See soil response # 2.
- 4. The conceptual site model (CSM) was that historic metal parts storage on the southern portion of the eastern parcel resulted in surface drips of PCB oils. The two soil sampling depth intervals of 0-0.5 feet and 3-3.5 feet below ground surface (bgs) are typically used to evaluate such surface releases to determine the nature and extent of contamination, the potential for contaminant migration, and human health and terrestrial ecological risk. Samples from the lower depths were analyzed when significant detections were observed in the shallow sample, and these results adequately determined the vertical extent and confirmed the CSM.
- 5. See soil response # 2.
- 6. Storm water sheet flow was the primary potential migration pathway of concern. Due to the current vegetation and hummocky topography on the eastern parcel, driving and wind erosion on the eastern lot is unlikely.